AMENDMENTS TO THE SPECIFICATION:

Page 1, please add the following new paragraphs before paragraph [0001]:

[0000.2] CROSS-REFERENCE TO RELATED APPLICATIONS

[0000.4] This application is a 35 USC 371 application of PCT/EP 2004/050785 filed on May 13, 2004.

[0000.6] BACKGROUND OF THE INVENTION

Please replace paragraph [0001] with the following amended paragraph:

[0001] ~~Prior Art~~ **Field of the Invention**

Please replace paragraph [0002] with the following amended paragraph:

[0002] The present invention relates to [[a]] **an improved** fuel injector for internal combustion engines ~~with the characteristics of the preamble to claim 1~~ **having first and second nozzle needles which control the flow of fuel from first and second injection orifices, respectively**.

Please add the following new paragraph after paragraph [0002]:

[0002.5] Description of the Prior Art

Please replace paragraph [0003] with the following amended paragraph:

[0003] A fuel injector of **the type with which this invention is concerned** ~~this kind~~ is known, for example, from DE 100 58 153 A1, and has an injector body that has at least one first injection orifice and at least one second injection orifice. A first needle guide of the injector body guides a first nozzle needle embodied in the form of a hollow needle, which controls the injection of fuel through the at least one first injection orifice. The first nozzle needle contains a second nozzle needle coaxial to it, which can control the injection of fuel

through the at least one second injection orifice. In the known fuel injector, the second nozzle needle is drive-connected to a drive piston, which, inside a control chamber, has a control surface that acts in the closing direction when subjected to pressure. The second nozzle needle has a pressure shoulder, i.e. a cross-sectional area of a second valve seat provided between the second nozzle needle and the injector body is smaller than a cross-sectional area of a second needle guide provided inside the first nozzle needle to guide the second nozzle needle. When the first nozzle needle is open, the pressure shoulder of the second nozzle needle is subjected to pressure, which causes the pressure shoulder of the second nozzle needle to act in the opening direction. When the first nozzle needle is open, if the second nozzle needle should also be opened, then the pressure in the control chamber can be reduced so that the opening force acting on the pressure shoulder of the second nozzle needle predominates. The complexity required to actuate the second nozzle needle in this connection is relatively high.

Page 2, please replace paragraph [0004] with the following amended paragraph:

[0004] ~~Advantages of the Invention~~

SUMMARY AND ADVANTAGES OF THE INVENTION

Please replace paragraph [0005] with the following amended paragraph:

[0005] The nozzle needle according to the present invention[[,]] ~~with the characteristics of the independent claim,~~ has the advantage of the prior art that the actuation of the second nozzle needle does not require control of the pressure prevailing in a separate control chamber. The present invention is based on the general idea of providing a mechanical catch

for actuation of the second nozzle needle, which couples the stroke motion of the first nozzle needle to a stroke motion of the second nozzle needle once the first nozzle needle has traveled a predetermined preliminary stroke. The present invention thus controls the opening of the second nozzle needle as a function of the opening stroke of the first nozzle needle. When the first nozzle needle opens, the second nozzle needle remains closed until the opening stroke of the first nozzle needle reaches the predetermined preliminary stroke. Once this preliminary stroke is reached, the first nozzle needle can then carry the second nozzle needle along with it, as a result of which, the second nozzle needle also opens. The opening stroke of the first nozzle needle can be controlled in the usual way by means of a corresponding actuator, in particular a piezoelectric actuator. In this connection, the opening times and an interval between the opening point of the first nozzle needle and the opening point of the second nozzle needle can be varied almost infinitely. It is thus possible to trigger the two nozzle needles to open one after the other using a single actuator. This considerably reduces the complexity required to implement a triggering of the second nozzle needle.

Page 4, please delete paragraph [0009].

Please replace paragraph [0010] with the following amended paragraph:

[0010] ~~Drawings~~ **BRIEF DESCRIPTION OF THE DRAWINGS**

Please replace paragraph [0011] with the following amended paragraph:

[0011] Exemplary embodiments of the fuel injector according to the present invention are ~~shown in the drawings and will be~~ explained in greater detail ~~in the subsequent description;~~ **herein below, with reference to the drawings in which** components that are the same,

similar, or functionally equivalent have been provided with the same reference numerals[[.]] , **and in which:**

Please replace paragraph [0012] with the following amended paragraph:

[0012] ~~Figs. 1 to 3~~ **Fig. 1** schematically ~~depict~~ **depicts a** very simplified longitudinal ~~sections~~ **section** through **a** fuel ~~injectors~~ **injector** in ~~different~~ **one** embodiment ~~forms.~~ **of the invention, and**

Please add the following new paragraph after paragraph [0012]:

[0012.2] Figs. 2 and 3 are views similar to Fig. 1 showing further embodiments.

Page 14, please replace paragraph [0043] with the following amended paragraph:

[0043] If an injection is now to be carried out by means of the at least one first injection orifice 3, then a corresponding actuator is triggered to execute a stroke actuation of the control piston [[51]] **61**. This stroke motion is oriented toward the injection orifices 3, 4 and is once again indicated by the arrow 67.

Page 15, please replace paragraph [0046] with the following amended paragraph:

[0046] To terminate the injection process, the actuator is triggered so that the control piston 61 retracts again, thus reducing the volume in the second booster chamber 59 once more. As a result, the pressure therein increases to approximately the pressure prevailing in the supply line 25. This changes the balance of forces acting on the ~~second~~ **first** nozzle needle 7 again, resulting in a closing force that closes the first nozzle needle 7. At the very latest when the first nozzle needle 7 has closed, the balance of forces acting on the second nozzle needle 9

also changes so that the closing force of the second spring 50 predominates and the second nozzle needle 9 also closes.

Page 16, please replace paragraph [0051] with the following amended paragraph:

[0051] The control piston 72 has a control surface 75, which is likewise disposed in the control chamber 70 and can be subjected to a pressure. In addition, a first spring 76 and a second spring [[51]] **50** drive the control piston 72 in the direction of a reduction of the volume in the control chamber 70. The first spring 76 here is supported between the injector body 2 and a piston 77 that is drive-connected to the actuator 74. If the compression-rigid coupling between the actuator 74, the coupling rod 73, and the control piston 72 can also transmit tensile forces, then the first spring 76 provides a direct prestressing of the control piston 72 in the direction of a volume reduction in the control chamber 70. But if the coupling between the actuator 74, the coupling rod 73, and the control piston 72 cannot transmit tensile forces, then the first spring 76 merely produces a resetting of the actuator 74 and consequently, a pressure-relief of the control piston 72 as a result of which the prestressing of the second spring 51 can act more powerfully in the direction of a volume reduction in the control chamber 70.

Page 17, please replace paragraph [0053] with the following amended paragraph:

[0053] By contrast with the embodiment forms in Figs. 1 and 2, in the embodiment form according to Fig. 3, the second spring [[51]] **50** does not rest directly against the injector body 2, but against the control piston 72 instead. As a result, the second spring [[51]] **50** on the

one hand, prestresses the second nozzle needle 9 into its closed position and on the other hand, prestresses the control piston 72 in the direction of a volume reduction in the control chamber 70. In the embodiment form shown here, the second spring [[51]] **50** and the catch contours 19, 20 are still contained in the first leakage chamber 45. The first leakage chamber 45 communicates with a second leakage chamber 83 via at least one bore 82. In this embodiment form, not the first leakage chamber 45, but the second leakage chamber 83 communicates with the relatively unpressurized reservoir via a leakage line 84.

Page 18, please replace paragraph [0054] with the following amended paragraph:

[0054] The second spring [[51]] **50** here rests against a supporting end 85 of the control piston 72, which is oriented toward the injection orifices 3, 4 and therefore away from the control surface 75.

Page 19, please replace paragraph [0057] with the following amended paragraph:

[0057] If more fuel per unit time then needs to be injected into the chamber 5, it can be necessary to also inject fuel into the combustion chamber 5 by means of the at least one second injection orifice 4. In order to make this possible, the actuator 74 is triggered to execute a further stroke motion so that the control piston 72 coupled to it also executes a further stroke motion. This causes the first nozzle needle 7 to lift even farther away from the first sealing seat, thus exceeding the predetermined preliminary stroke 24. This once again causes the desired cooperation of the two catch contours 19, 20 so that the opening stroke of the ~~second~~ **first** nozzle needle 7 exceeding the preliminary stroke 24 brings the ~~first~~ **second**

nozzle needle 9 along with it. As a result, the second nozzle needle 9 lifts away from the second sealing seat 16, which causes the at least one second injection orifice 4 to also communicate with the nozzle chamber 26 so that it can also inject fuel into the chamber 5.

Page 20, please add the following new paragraph after paragraph [0059]:

[0060] The foregoing relates to a preferred exemplary embodiment of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.